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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ranjit Bhambra

Serial No.: 09/820,316

Group Art Unit: 3617

Filed: March 29, 2001

Examiner: L. Nguyen

Title:

WHEEL HAVING SPOKES WITH V-SHAPED CROSS-SECTIONS

APPEAL BRIEF

Mail Stop Appeal Brief-Patents Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 FEB - 6 2004

GROUP 3600

Real Party in Interest

The real party in interest is Dr. Ing. h.c.F. Porsche Aktiengesellschaft of Porscheplatz 1, D-70435 Stuttgart, Germany, by virtue of an Assignment recorded in the U.S. Patent and Trademark Office assignment records at reel 011664, frame 0048.

Related Appeals and Interferences

No interferences or other appeals which would affect, be affected by, or have a bearing on a decision in this appeal are known.

Status of Claims

Claims 1-17 are pending in this application. Claims 1, 4, and 15 are rejected and are now appealed. Claims 2, 3, 5-14, 16, and 17 are not involved in this appeal; each of these claims contains allowable subject matter but is objected to as depending on a rejected base claim. An Appendix containing a copy of claims 1, 4, and 15 is attached to this Appeal Brief.

Status of Amendments

An Amendment After Final Rejection was filed on July 28, 2003. Section 2 of the Advisory Action (Paper No. 14) mailed August 12, 2003, indicates that the Amendment has not been entered.

Summary of Invention

A concise explanation of the invention will now be provided. This explanation refers, by way of example only and without intending to limit the claims, to certain drawing figures and paragraph and line numbers of the specification of this application.

A wheel 1 for motor vehicles has a wheel hub 2, a rim 3, and spokes 4 by which the wheel hub and the rim are connected with one another (see, for example, paragraph 20, lines 1-3). In first areas 11 connected with the wheel hub 2, the spokes 4 have solid cross-sections (see, for example, paragraph 22, lines 2-4). In second areas 12 connected with the rim 3, the spokes 4 have V-shaped cross-sections as illustrated in Figures 5b and 5c (see, for example, paragraph 22, lines 15-20). The spokes can be arranged to correspond with

openings 6 for receiving fastening bolts (not shown) which are provided in the wheel hub 2 (see, for example, paragraph 20, lines 3-8), and indentations 7 can be provided between the openings 6 (see, for example, paragraph 21, lines 1-3). As best shown in Figures 1, 2, and 4, one continuous, approximately cylindrical hollow body 8, 9, respectively, may be provided on an interior side (cylindrical body 8) and on an exterior side (cylindrical body 9) of the wheel hub 2 (see, for example, paragraph 21, lines 3-9).

In their second areas 12, with the V-shaped cross-sections shown in Figures 5b and 5c, the spokes 4 may have thickenings 17, 18 on respective free front surfaces of legs 15, 16 (see, for example, paragraph 22, lines 23-26). The legs of the spokes, in these second areas, can have widths s which increase continuously toward the rim 3, and flat elements 19 and 20 may be formed in transition areas from the spokes to the rim (see, for example, paragraph 24, lines 1-8). Progressive transition from the first areas 11 to the second areas 12 may take place (see, for example, paragraph 5, lines 4-11, and paragraph 22, lines 1-2). The transitions from the first areas 11 to the second areas 12 may be configured such that, along longitudinal courses of the spokes 4 from the wheel hub 2 toward the rim 3, the cross-sections change from solid to triangular (see, for example, paragraph 22, lines 2-8) and from triangular to V-shaped (see, for example, paragraph 22, lines 8-20).

Issue

The sole issue presented for review is whether claims 1, 4, and 15 are properly rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent 521,587 to Hirt.

Grouping of Claims

Claims 1 and 15 stand or fall together. Claim 4 is believed to be separately patentable, however, and does not stand or fall together with claims 1 and 15.

Argument

I. The rejection of claims 1 and 15 under 35 U.S.C. §102(b) is erroneous.

Under U.S. law, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Schering Corp. v. Geneva Pharmaceuticals Inc., 339 F.3d 1373, 1379, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003). The Hirt patent relied on does not expressly disclose or inherently describe each and every element of claim 1.

Claim 1 defines a wheel for motor vehicles comprising spokes having solid cross-sections in first areas connected with a wheel hub and V-shaped cross sections in second areas connected with a rim. These limitations serve to distinguish the wheel specified by claim 1 from the car wheel forming the subject matter of the Hirt patent. An illustration providing a comparison of Figure 3 of

the present invention and a part of Figure 3 of the Hirt patent is appended to this Appeal Brief and shows differences between the invention and the Hirt car wheel.

The spokes or arms a⁴ of the Hirt car wheel do not have solid cross-sections in first areas connected with the hub a and V-shaped cross-sections in second areas connected with the rim or tread a¹ as independent claim 1 particularly requires. Instead, each of the Hirt spokes or arms a⁴ has a substantially uniform thickness and a corrugated, approximately V-shaped cross-section throughout its entire length, from the point of juncture with the hub a to the point of connection with the rim or tread a¹. Attention is directed to lines 66-78 on page 1 and to lines 7-13 on page 2 of the Hirt patent. All "areas" of each Hirt spoke or arm a⁴, therefore, have substantially the <u>same</u> corrugated, approximately V-shaped cross-section. Arbitrarily characterizing some areas of the Hirt spokes or arms as having solid cross-sections and other areas of the same spokes or arms as having V-shaped cross-sections is impermissible.

Finally, it is asserted, in section 4 on page 3 of the Office Action dated March 27, 2003, that locations of the first and second areas are not claimed. That assertion is not correct. Claim 1 explicitly defines the first areas as those areas "connected with the wheel hub" and the second areas as those areas "connected with the rim."

For reasons discussed above, the rejection of claim 1 under 35 U.S.C. §102(b) set forth by the Examiner is erroneous and should be reversed. The rejection of dependent claim 15 under 35 U.S.C. §102(b) is also erroneous for the same reasons and should be reversed.

II. The rejection of dependent claim 4 under 35 U.S.C. §102(b) is erroneous for reasons discussed above in connection with claim 1 as well as the following reasons. The spokes or arms a4 of the Hirt car wheel do not have thickenings as the Examiner asserts and as claim 4 particularly defines. Reference numbers 12 and 13 designate curves, not thickenings, and, again, each of the Hirt spokes or arms a4 has a substantially uniform thickness throughout its corrugated, approximately V-shaped cross-section. The Hirt patent, therefore, does not expressly disclose or inherently describe each and every element of claim 4. Even assuming that the rejection of claim 1 discussed above is not erroneous, the rejection of claim 4 under 35 U.S.C. §102(b) is erroneous and should be reversed.

Date: January 30, 2004

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Respectful

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Appendix

- 1. A wheel for motor vehicles comprising a wheel hub, a rim, and spokes by which the wheel hub and the rim are connected with one another, wherein, in first areas connected with the wheel hub, the spokes have solid cross-sections and, in second areas connected with the rim, the spokes have V-shaped crosssections.
- 4. The wheel according to claim 1, wherein, in their second areas with the V-shaped cross-sections, the spokes have thickenings on respective free front surfaces of legs thereof.
- 15. (Amended) The wheel according to claim 1, wherein progressive transitions from the first areas to the second areas take place.

